direction instead of longitudinally. The machine consists of a powerful bed-plate, with two sets of rollers, the second of which not only rotate on their own axes, but, with their frame and gearing, revolve in a vertical direction; and so twist the iron into a form precisely similar to that of a wire rope, and greatly increase its tenacity and toughness. "We have seen samples of the iron made by the machine," says the *Mining Journal*, "one of which being polished and bronzed, shows the fibres to lie in contortions similar to those in a good gun-barrel."

TENDERS

For the erection of a dwelling-house and mill, at Ray Mills, Maidenhead, for Mr. J. T. Bell; Mr. W. Brown, architect.

I'Anson	£3,496	0	0
Billing	3,410	0	0
Cooper	3,393	4	6
Biggs (accepted)	3,310	0	0

MEETINGS OF SCIENTIFIC BODIES

Held during the ensuing week.

TUESDAY, MAY 3.—Institute of Civil Engineers, 8 P.M.

WEDNESDAY, 3.—Society of Arts, 8 P.M.

THURSDAY, 4.—Royal Society, 4½ P.M.; Society of Antiquaries, 8 P.M.

TO CORRESPONDENTS.

"*Regular Subscriber.*"—The Portland cement should be mixed with water to the consistency of mortar, and applied immediately, care being taken to let the work on which it is to be used be thoroughly wetted previous to its application. It should be worked in one coat; and for stuccoing in dry situations, should be mixed with four parts of clean, well-washed, and dried river sand to one of cement. In damp situations less sand should be used; and for water works it should be used pure.

"*C.'s Self-acting Valve*" broke when we touched it; and we were more tender with it than most housemaids would be. It is similar to one invented by a foreigner, and illustrated in THE BUILDER some time ago.

"*C. B. R.'s Query.*"—A note of ours to this query last week, pointing out that it was an old friend with a new face, and had been answered in THE BUILDER some time ago, was accidentally omitted. We will see if any of the replies sent are superior to the solution then given.

"*To clean Slate.*"—A correspondent asks to be informed of "the best method of cleaning Welsh slate shelves in a dairy."

"*Grease.*"—"Sir, I should feel greatly obliged if any of your numerous readers can inform me of any means by which a spot of grease can be removed from a drawing."

"*Received,*"—"J. H." "W. T.," "J. W. P.," "J. B.," "D. C." "A. B.," "J. H.," "Captain C.," "V. P.," "J. S.," "Henrieus," "A. O. D."

"*Books received,*"—"The Law of Fixtures" to which is added the Law of Dilapidations." By S. G. Gwady, barrister-at-law. (Richards, Fleet-street.) "Hickman's Attempt to Disseminate the Styles of Architecture in England." Fifth edition; with additions and new plates. 1846. (J. H. Parker, Strand, and Oxford)

"*Books, Prices, and Addresses.*"—We have not time to point out books or addresses.

ADVERTISEMENTS.

WOOD PAVING.—The Directors of the Metropolitan Patent Wood Paving Company are prepared to execute orders on the shortest notice, for paving Railway Stations, Sheds, Wharf Yards, Inland rooms, Stableyards, Forges, Workshops, Breweries, Stables, and Barns. Their system of Wood Paving is admirably adapted for the above purposes, and is much in use.—Office, Belgrave Works, Thames Bank, Pimlico.

PAVING, 2s. 9d. PER SQUARE YARD, Basements, Foot-walks, Mail-houses, Corn Stores, Floors of Warehouses, and every description of Pavement laid down at the above low price, and the work guaranteed.—Apply to JOHN PILKINGTON, POLONCEAU'S BITUMEN PAVEMENT OFFICE, 13, WHARF-ROAD, CITY-ROAD.—N.B. Country Agents and Railway Engineers and Contractors supplied with the best bitumen for covering bridges and arches.

CAEN STONE.—LUARD, BEEDHAM, and Co beg to inform Architects, Surveyors, Merchants, Builders, and others, that are importing, by large and frequent shipments, CAEN STONE of the BEST QUALITY, from their Quarries at Allemagne, quarried during the late season. L., B., and Co., invite inspection of persons capable of judging of its quality, at their depôt, Caen Wharf, Rotherhithe.

Orders executed with despatch to all parts of the United Kingdom.

Office, 18, Southwark-square, near Southwark-bridge; Depôt, Caen Wharf, Rotherhithe; and Store in Quai, à Caen, Normandy.

SAMUEL CUNDY, Mason and Builder, PIMLICO MARBLE and STONE WORKS, Belgrave Wharf, Pimlico, begs to inform Architects and the Public that MASONS' WORK, in all its branches, is executed on the most reasonable terms, in such manner as must meet the views of his Patrons.

GOTHIC WINDOWS and the more elaborate Works produced at a reduced cost, on a system that combines economy with the required accuracy and truthfulness.

FONTS from £5 upwards.

MONUMENTS and TOMBS in great variety of design.

The most varied Assortment of ORNAMENTAL, PLAIN, and ENCAUSTIC TILES, in Town, on view.

Stone-hot Chimney-pieces, from ..... 12s.
Vein-Marble ..... 40s.

RESTORATIONS Estimated for (in which Branch S. C. has had considerable practice). Patterns fitted up, &c. &c.

Goods Landed, Housed, and Delivered.

SLATE SLABS.—The Finest Slabs produced in WALES, of surpassing strength, pure in texture, and free from spots, may be had of Mr. MAGNUS, at the PIMLICO SLATE WORKS, Upper Belgrave-place, planed both faces at the price that inferior Slabs in the rough scuff faces are currently selling. These reduced prices are also subject to a very large trade discount. These Slabs have been extensively used at Buckingham Palace, Strathfieldsaye, the Royal Naval and Military Schools, Deptford, the Model Prison, Pentonville, the Goulston-square Baths and Washhouses, on most of the Railways, and are specified for by the most eminent Architects. Whole cargoes supplied direct from Mr. Magnus's Works in Wales, planed both faces at very low rates. Slate Tanks, Fittings for Dairies, Larders and Wine Cellars, Landings, Chimney-pieces, Chimney Pieces, &c. &c.

PREPARED FLOORING BOARDS.

ALWAYS ON SALE, a Large Assortment of DRY PREPARED FLOORING BOARDS and MATCHED BOARDING of all sorts, planed to a parallel width and thickness, from ¾ inch to 1½ inch thick.

TIMBER, DEALS, OAK PLANKS, SCANTLINGS, SASH SILLS, &c.

Apply at W. CLEAVES Timber Yard, Wilton-road, Pimlico (late E. Moore and Son), and Great Smith-street, Westminster.—Mouldings prepared by machinery.

ALFRED ROSLING begs to inform the Trade and Consumers generally, that he keeps constantly in stock a large and very general assortment of Prepared Floor Boards and Matched Boarding, planed to a parallel breadth and thickness, and fit for immediate use; also a variety of machine-prepared Mouldings, which are finished with great accuracy and attention to quality of workmanship.—Southwark Bridge Wharf, Bankside, and Old Barge Wharf, Upper Ground-street, Blackfriars.

TADAMS (from Byron and Co.), late S. Dare, MAHOGANY and TIMBER MERCHANT, Bermond's New Road, near the Bricklayers' Arms. SEASONED FLOORING, MATCH BOARDING FIT FOR IMMEDIATE USE, and MOULDINGS prepared by machinery, Cut Deals and Scantling of every dimension, Mahogany, Cedar, Rosewood, Wainscot, Elm, Beech, Ash, &c., in planks, boards, veneers, and logs; Pantile, Oak, and Fir Laths, Wheelwrights' Goods. All sawn and prepared goods delivered free of expense (except timber). Sawing charged at mill prices. Very extensive Drying Sheds.

SAW MILLS, GILLINGHAM-STREET, PIMLICO.

TIMBER of any size, PLANK, DEALS, and BATTENS, &c., Sawn on the most approved principle, Boards, &c., Prepared, Matched, and Grooved, by Muir's Patent Machinery. The Mills have all the advantages of navigation and water-carriage, being connected with the Thames by the Grosvenor Canal. Goods fetched from the docks and carted home free of charge.

Address to HENRY SOUTHAM,
Saw Mills,
Gillingham-street, Pimlico.

N.B. Estimates given for Sawing and Planing.

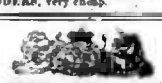
RODNEY SAW MILLS, BOLLING-BROOK-ROW, BATTERSEA.—The Proprietors of the Rodney Saw Mills beg to acquaint the Building Trade in general, that from the improved nature of their Machinery, they are enabled to compete with similar establishments in the Execution and Prices of the work they may be favoured with. An inquiry and inspection is solicited. Dispatch and fair prices may be relied on, a list of which can be obtained at the Works, or at the Office of W. P. and Co., No. 8, Old Jewry.—The Works having a river frontage opposite the Kennington Canal, goods can be landed and stored

WOOD THOROUGHLY SEASONED in DAYS instead of YEARS, by DAVISON and SYMINGTON'S PATENTED PROCESS, at the Patent Desiccating Company's Establishment (for Steaming, Sawing, and Planing Wood), at the Grand Surrey Mills, immediately adjoining the Commercial and East Country Docks, Rotherhithe. The new process ensures the entire removal of moisture, hardens the grain, prevents further shrinkage, and strengthens the fibre. For scale of prices, or license to work the patent, or any further information, address, post-paid, or apply to W. H. TANQUERAY, Secretary at the temporary offices of the Company, 18, New Broad-street, City.

TO BUILDERS, EXCAVATORS, &c.

BARROWS to BE SOLD, very cheap.—120 Barrows, mostly Excavators, made of ash frames and inch elm tops. Persons in want of such will find this highly advantageous, as they may be bought full 20 per cent. less than the selling prices. G. ELLIS, 3, Tottenham-court, New-road, St. Pancras. Also some LADDERS, very cheap.

By Her Majesty's Royal Letters Patent.



GLASS VENTILATORS FOR WINDOWS.

BAILLIE'S Patent Transparent Slide Valve VENTILATORS, supplied at a reduction of 40 per cent. from the original Tariff. Their extensive and successful application to public offices, bed-rooms, and the cure of smoky chimneys, prove their great utility. Coloured Glass of every tint at wholesale prices.—Designs and estimates for church and ornamental windows forwarded on application to EDWARD BAILLIE, Glass Painter, Stained, and Embosser, 13a, Cumberland Market, Regent's-park, London, where specimens are to be seen.

VENTILATION.—FAIRS' PATENT TRANSPARENT VENTILATORS.—The progressive increase in the use of this invention during several years' trial, in which it has had to contend with many imitations, encourages the Proprietors to recommend it with confidence to the Public generally, and to the Building Trade in particular, to whom they are now enabled to offer greater inducements for its adoption. For the CURE of SMOKY CHIMNEYS, and the thorough, but safe and agreeable, Ventilation of Apartments, Offices, &c., this invention is unequalled: and its general adoption in the Royal Palaces, the Public Offices, Banking-houses, Insurance Offices, and in the dining rooms and other apartments in the houses of the nobility and gentry, are sufficient evidence of its efficacy.

Orders received by FAIRS and Co. No. 138, New Bond-street; BUNNETT and CORPE, No. 26, Leonhard-street; and at the Manufactory, 13, Gillingham-street, Pimlico.

N.B. Ornamental Zinc Borders and Casements for Gothic Windows, Stained Glass, &c.

DR. ARNOTT'S CHIMNEY VENTILATOR.

F. EDWARDS, Stove Maker to her Majesty, 20, Poland-street, Oxford-street, begs to call the attention of Architects, Builders, Gas-fitters and the Public, to the truly invaluable advantages to be derived from the use of Dr. Arnott's Valve for the Ventilation of Rooms of every description.

Prices from 7s. 6d. to 25s. each. A prospectus, containing full particulars, to be had on application.

SMOKY CHIMNEYS—NO CURE, NO PAY.

Twenty-five years' extensive experience in all the branches of a stove manufacturing business, and the cure of smoky chimneys of every description, fully justifies F. E. in stating that he can undertake the cure of smoky chimneys on the above equitable terms.

GRANT'S PATENT ROTARY WIND-GUARD, for the prevention of Downward Drafts and cure of Smoky Chimneys, by discharging a Strong Current of Air at the Mouth of Chimney-Pot. The attention of the Public and the Trade is respectfully solicited to this simple Apparatus. The Patentee guarantees its effecting the purposes named. Let the wind blow from what quarter it may, it is not liable to derangement; can be easily and cheaply applied, and does not in any way interfere with the Sweeping the Chimney.

This apparatus is also applied to work an archimedian screw or Bunsel, for exhausting the vitiated air from public or crowded rooms. In no instance has it failed to accomplish the above-named objects.—Manufactured by the Patentees, LAMBERT and GRANT, 31, Elizabeth-square, Eaton-square.

JENNINGS'S SHOP-SHUTTER FASTENER SHOES as well as SECURES the Shutters; they can be had BY THE TRADE in Malleable Iron, for 1s. 6d. per Shutter.

JENNINGS'S PATENT COCKS, JOINTS, VALVES, CLOSETS, &c. &c., may be seen or had at the Manufactory, 39, Great Charlotte-street, Blackfriars-road.

THOSE SPLENDID FRONTS, known as Lambeth House, Westminster-bridge-road, have just been secured with JENNINGS'S SHOP-SHUTTER SHOE and FASTENER; as have also those extensive range of Fronts known as Allman's Warehouses, and being Nos. 70, 71, 72, 73, 74, 75, Westminster-bridge-road. This invention has been before the public about fourteen months, and at this time upwards of 1,000 fronts can be referred to. The fronts in New Oxford-street, secured by Jennings's Patent Fasteners, look much neater, and are more secure, than those fastened with the Clumsy Bar.

They may also be had in Brass, by the Trade, at 6s. and in Malleable Iron at 3s. per shutter. The cost, even in Brass is one-third less than the cost of the Bar and Iron Hasp Shoe.

JENNINGS'S other Patented Inventions, such as the India-Rubber Valve Cocks, &c. &c., can be seen or had at the Manufactory, 39, Great Charlotte-street, Blackfriars-road.

JENNINGS'S PATENT VALVES can now be had of WARNER and SONS, Brassfounders, Jewin Crescent, they being duly licensed to manufacture and sell the same.

SNOXELL'S PATENT SAFETY REVOLVING WOOD SHUTTERS, Manufactory, 18, REGENT-STREET and 18, CHANCERY-LANE. Patent sealed on the 4th day of February, 1846, for Fourteen Years, for Improvements in Revolving Shutters of WOOD and IRON, consisting of the Method of Hanging and Locking the Shutters, Machinery, and Two for Hinging and Strengthening the Edges of Wood Laths with Iron.—The Patentee having fixed up some hundreds, will be prepared on forwarding the Testimonials of Architects, Principals of large Establishments, and others, wherever now in use, which fully guarantee the Patentee in stating they are beyond dispute superior to any other Revolving Shutter for durability, security, and simplicity, without the use of cog-wheel worm and screw gear, or any other complicated machinery employed by other makers.

PATENT CONVEX REVOLVING IRON SHUTTERS, recently manufactured, under license, by the late firm of H. HOWARD and Co., 104, Fleet-street.

HARCOURT QUINCEY, Patentee.

CLARK and Co., Manufacturers, beg to call the attention of Architects, Builders, and others, to the IMPORTANT IMPROVEMENTS in the above Shutters, and inspection invited at the Manufactory. The great importance of strength and stiffness in the laths of REVOLVING IRON SHUTTERS in affording increased security, is obvious, and it only remains to point out the fact, that the patent convex laths are twelve times stronger than the ordinary flat laths, to insure their general adoption.

CLARK and Co. also invite attention to their greatly improved gearing, for raising and lowering the present Shutters, which possesses all the advantages of the endless screw motion and wheel, cannot, even by wear, be liable to run down, and entirely avoids the necessity of using the ratchet wheel, and is at once simple and thoroughly effective; and to SAFER and MORE DURABLE than any plan yet adopted for that purpose; thus rendering the Patent Revolving Shutters the SAFEST and MOST EFFECTIVE in use. These Shutters are fixed horizontally either above or below the window or door, or vertically, for which position the greatly increased strength of the convex laths renders them peculiarly suitable.

CLARK and Co. are the SOLE MANUFACTURERS of REVOLVING SHUTTERS, WITH CONVEX IRON LATHS, Engravings and Prospectuses forwarded on application. Also, PROVED DRAWN METALLIC SASH BARS, ASTRAGALS, MOULDINGS, STALLBOARD PLATES, &c.

Steam Engines always on hand, Sawing and Planing Machinery of every description made to order. Wrought-iron Box, and Castiron Girders for bridges, buildings, &c.—CLARK and Co., Engineers, 28, Wapping, London.

BUNNETT and CORPE, ENGINEERS, Patentees of REVOLVING IRON AND WOOD SAFETY SHUTTERS, and of ORNAMENTAL METALLIC SASH BARS, MOULDINGS, &c. IN BRASS, COPPER, ZINC, &c.

And Importers of the MANUFACTURE of HAVEN'S PATENT DIAGONAL GRATINGS, for Areas, Railway Floors, &c.

The experiments of Bunnett and Corpe's Patent Revolving Iron Shutters is sufficiently established by their most extensive use and the fact of their having superseded all others, after experiment, and by practical skill and experience have been selected, and the prices greatly reduced, to render them the CHEAPEST, as well as BEST IRON SHUTTERS.

B. and C. have also made great (considered) improvements in Revolving Wood Shutters, which are fitted up with proper metallic hinges that cannot rust; without which no shutter can be safe or durable, and are warranted by the patent running gear as for Iron Shutters, or counterbalanced in a new and peculiar way, and are wound up or down with the greatest ease without the use of objectionable bead lines. A comparison with any others, as to quality and price, is respectfully solicited.

A modification of the above, working vertically, is especially adapted for Bay and Oriel Windows.

The prices of the Patent Metallic Sash Bars, &c. have been revised, and where practical, reduced. Shop Fronts, &c. are completely fitted and fixed in a superior style; either plain or ornamental, and with strong drawn moulded stallboard plates handsomely engraved, also completely glazed with best plate glass.

The Patent Diagonal Wrought Iron Gratings will be found a great desideratum for Areas as above fronts, in Sewers, and Warehouse Floors, and for balcony floors, as it does not obstruct the light, yet admits of ladies walking over or standing on the same.

IMPROVED BENCH AND FLOORING CRAMPS FOR BUILDERS,

which are greatly superior to any hitherto introduced.

Manufactories of Improved Steam Engines, Sawing and other machinery, especially adapted for builders' purposes, which may be seen in operation, daily, at the Works, Deptford, Kent.

Estimates given, and Contracts taken, in town or country. Patterns and every particular may be obtained on application at the Office of the Patentees, 26, Leonhard-street, London; and at the Works, Deptford, Kent.

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The Committee for carrying into effect this laudable charity, desire to solicit the aid of all those connected with the trade to enable them to commence granting relief to the deserved and afflicted members. The Charity, although in its infancy, has far to be one of the noblest institutions in London, and purposes to be extensive in its operations, perhaps more than any institution of a similar description in the kingdom; for, although the first principle is to assist deserved Masters, their Widows, and Children, it will also afford relief to Workmen in case of accidents, without the necessity of being members of the institution, and thereby save from destitution and misery their families during the period of affliction. The Committee have pleasure in stating, that the fund for raising the "Builders' Alms Houses" is satisfactorily proceeding, and as soon as the required sum is subscribed, a meeting will be called to decide upon the expediency of carrying out the intention.

The first Anniversary Dinner in aid of the funds of the Institution will take place in July next, particulars of which will shortly be advertised; Gentlemen kindly accepting the office of Steward will not in any way be liable for the expenses of the Dinner.

Subscriptions and Donations will be thankfully received by the Bankers, the Treasurer, and the Collectors.

The Rules and Regulations of the Charity, and other information, may be readily obtained of the Secretary, at the Office, Poland House, Broad-street, Golden-square, on Mondays and Thursdays from Ten to Four.

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